

Date: December 22, 2011

To: Thomas J. Bonfield, City Manager
Through: Theodore L. Voorhees, Deputy City Manager
From: Mark D. Ahrendsen, Transportation Department Director
Wesley Parham, P.E., Assistant Transportation Department Director
Pete Nicholas, P.E., Traffic Operations Engineer
Subject: North Carolina Railway Company and Norfolk Southern Railway
Company Wireline Agreements for W. Chapel Hill St. and S. Roxboro St.
Underpass Lighting

Executive Summary

The City Transportation Department requests authorization to execute tripartite wireline (encroachment) agreements with the North Carolina Railroad Company (NCR) and Norfolk Southern Railway Company (NSR) to install underpass street lighting at two locations: 1) West Chapel Hill Street (SR 1127) underpass at NCR - Milepost (*H-054 plus 3447 feet*); and 2) South Roxboro Street (US 15-501 Business) underpass at NCR - Milepost (*H-055 plus 1258 feet*).

The Transportation Department recommends that the City Council authorize the City Manager to execute the tripartite encroachment agreements with NCR and NSR to install underpass lighting with an NCR encroachment fee of \$18,348.57 and a NSR fee of \$400.00. Construction will be completed using City forces. The Engineer's Estimate for project construction materials is \$40,000.00. Funds are budgeted for these improvements in the City's Capital Improvements Program Miscellaneous Thoroughfares and Street Improvements Account. Construction is expected to be completed within 90 days of the execution of the encroachment agreements. The City will be responsible for maintenance and operation of the streetlights. Operating costs will be minimal and covered in the Department's annual operation budget.

Recommendation

The Transportation Department recommends that the City Council: 1) authorize the City Manager to execute the tripartite Wireline Agreement "NCR File No. o_h-054+3447 and NSR File No. 1162603," with NCR and NSR for the installation of street lighting, conduit and fixtures at a total cost of \$12,558.62; and 2) authorize the City Manager to execute the tripartite Wireline Agreement "NCR File No. o_h-055+1258 and NSR File No. 1162605," with NCR and NSR for the installation of street lighting, conduit and fixtures at a total cost of \$6,189.95.

Background

The underpass lighting at the West Chapel Hill Street (SR 1127) and South Roxboro Street (US 15-501 Business) NCR underpass can no longer be maintained or operated. The systems require replacement to current lighting and electrical code standards. The City

issued a contract to design an energy-efficient low-maintenance light emitting diode (LED) underpass lighting system to replace the existing light systems.

City Transportation staff worked in conjunction with NCDOT, NCRR and NSR to design a LED underpass lighting system. NCDOT issued a right of way encroachment agreement on February 17, 2011. NCRR and NSR issued a wireline encroachment agreement on November 29, 2011.

Issues and Analysis

The replacement high-efficient LED light fixtures will meet current Illuminating Engineering Society (IES) standards, NCDOT standards and railroad encroachment requirements. The installation will replace electrical conduits, junction boxes, electrical breakers and include a photo-control system at each Duke Energy electric meter per National Electrical Code (NEC) standards. In order to construct the project, the City must obtain encroachment approval from NCRR and NSR.

Alternatives

- Authorize the City Manager to execute tripartite wireline (encroachment) agreements with NCRR and NSR at a total cost of \$18,748.57 (NCRR encroachment fee of \$18,348.57 and NSR fee of \$400.00) to allow the City to upgrade the lighting system at each underpass; or
- Do not authorize the execution of the agreements, and not proceed with the lighting improvement project.

Financial Impact

The one-time license fee to upgrade the underpass lighting system at the West Chapel Hill Street (SR 1127) and NCRR underpass is \$12,358.62. The fee for NSR is \$200.00. The one-time license fee to upgrade the underpass lighting system at the South Roxboro Street (US 15-501 Business) Underpass at NCRR - Milepost (*H055.24*) is \$5,989.95. The fee for NSR is \$200.00. The total cost of the encroachment agreements and fees is \$18,748.57. The project construction costs of \$40,000.00 are already authorized in the Miscellaneous Thoroughfares and Street Improvements Capital Project.

SDBE Requirements

There are no SDBE requirements for this project.

Attachments

- A – Wireline Agreement (NCRR File No. o_h-054+3447 and NSR File No. 1162603)
- B – Wireline Agreement (NCRR File No. o_h-055+1258 and NSR File No. 1162605)